abcam

Product datasheet

Recombinant human CD116 protein (Fc Chimera) ab83993

2 Images

Description

Product name	Recombinant human CD116 protein (Fc Chimera)
Biological activity	ab83993 bound to protein A sepharose beads was able to pull down its ligand, GM-CSF.
Purity	> 95 % SDS-PAGE.
Expression system	HEK 293 cells
Accession	**P15509**
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	Theoretical Sequence: EKSDLRTVAPASSLNVRFDSRTMNLSWDCQENTTFSKCF LTDKKNRVV EPRLSNNECSCTFREICLHEGVTFEVHVNTSQRGFQQKLL YPNSGREG TAAQNFSCFIYNADLMNCTWARGPTAPRDVQYFLYIRNSK RRREIRCP YYIQDSGTHVGCHLDNLSGLTSRNYFLVNGTSREIGIQFFD SLLDTKK IERFNPPSNVTVRCNTTHCLVRWKQPRTYQKLSYLDFQYQ LDVHRKNT QPGTENLLINVSGDLENRYNFPSSEPRAKHSVKIRAADVRI LNWSSWS EAIEFGSDDGGSSNTKVDKKVEPKSCDKTHTCPPCPAPE LLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG VEVHNAKTK PREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALP APIEKTISK AKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA VEWESNGQ PENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSC

SVMHEALHN HYTQKSLSLSPGK

Additional sequence information	Fusion of aa 1-320 of human GM-CSF Receptor alpha and aa 90-330 of Fc region of human IgG1 (P01857). The chimeric protein was expressed in modified human 293 cells.

Specifications

Our **Abpromise guarantee** covers the use of **ab83993** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Lyophilized
Additional notes	ab83993 bound to protein A sepharose beads was able to pull down its ligand, GM-CSF. This product was previously labelled as GM-CSF Receptor alpha

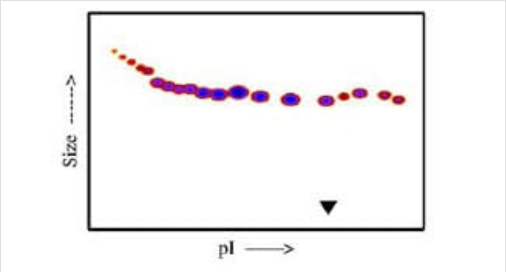
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C. Constituents: 1% Human serum albumin, 10% Trehalose This product is an active protein and may elicit a biological response in vivo, handle with caution.
Reconstitution	It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial. Following reconstitution short-term storage at 4°C is recommended, and longer-term storage of aliquots at -18 to -20°C. Repeated freeze thawing is not recommended.

General Info

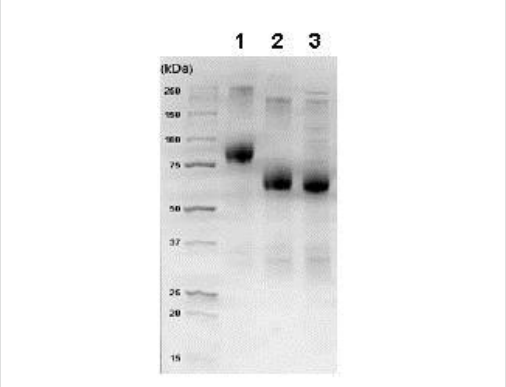
Function	Low affinity receptor for granulocyte-macrophage colony-stimulating factor. Transduces a signal that results in the proliferation, differentiation, and functional activation of hematopoietic cells.
Involvement in disease	Defects in CSF2RA are the cause of pulmonary surfactant metabolism dysfunction type 4 (SMDP4) [MIM:300770]. A rare lung disorder due to impaired surfactant homeostasis. It is characterized by alveolar filling with floccular material that stains positive using the periodic acid-Schiff method and is derived from surfactant phospholipids and protein components. Excessive lipoproteins accumulation in the alveoli results in severe respiratory distress.
Sequence similarities	Belongs to the type I cytokine receptor family. Type 5 subfamily.
Domain	The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding. The box 1 motif is required for JAK interaction and/or activation.
Cellular localization	Secreted and Cell membrane.

Images



Functional Studies - Recombinant human CD116 protein (Fc Chimera) (ab83993)

Densitometry of protein isoforms visualised by 2-DE.
The densitometry scan demonstrates the purified human cell expressed protein exists in multiple isoforms, which differ according to their level of post-translational modification.
The triangle indicates the theoretical MW and pI of the protein.



SDS-PAGE - Recombinant human CD116 protein (Fc Chimera) (ab83993)

1D SDS-PAGE of ab83993 before and after treatment with glycosidases to remove oligosaccharides.
Lane 1: ab83993
Lane 2: ab83993 treated with PNGase F to remove potential N-linked glycans
Lane 3: ab83993 treated with a glycosidase cocktail to remove potential N- and O-linked glycans.
Approximately 5 µg of protein was loaded per lane; Gel was stained using Deep Purple™.

Drop in MW after treatment with PNGase F indicates presence of N-linked glycans. A tightening of the band after treatment with the glycosidase cocktail indicates O-linked glycans may be present. Additional bands in lane 2 and lane 3 are glycosidase enzymes.

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